

**REMARKS**

The Official Action dated August 20, 2003, has been carefully considered. Accordingly, the changes presented herewith, taken with the following remarks, are believed sufficient to place the present application in condition for allowance. Reconsideration and allowance of all remaining claims is respectfully requested.

Claims 5-7 have been amended for purposes of clarity, support for the amendments being found in the specification and claims as filed. It is believed that these changes and additions do not involve any introduction of new matter, whereby entry is believed to be in order and is respectfully requested. Claims 1-2, 5-7 and 9-11 remain in the application for consideration.

In the Official Action, claims 1-2, 5-6 and 9-11 were rejected under 35 U.S.C. § 103(a) as being unpatentable over the Steventon WO 97/17939 (hereinafter referred to as "Steventon") "for the reasons set forth in the office action in paper number 4." Although no previous rejection had been made to claims 1-2, 5-6 and 9-11, under § 103 in view of Steventon, the Examiner previously asserted that Steventon discloses a spray dried granular powder having a volume average particle size in the range from about 20  $\mu\text{m}$  to about 500  $\mu\text{m}$ , and that the powder is prepared by spray-drying an aqueous dispersion of silicone oil and a water-soluble carrier, where the silicone oil is formed from discrete droplets having a volume average droplet size in the range from about 0.5  $\mu\text{m}$  to about 20  $\mu\text{m}$ . In addition, the Examiner previously contended that Steventon teaches a mixture of granulated components before tableting, the granulated components having a spray-dried powder having cetyl dimethicone, dimethicone copolyol, starch and sorbitol; an effervescent generator having malic acid or tartaric acid and sodium carbonate and sodium bicarbonate; and other ingredients. In reply to Applicants' previous arguments, the Examiner noted that Steventon

does not disclose the irregular dimension of flakes, but alleged that it would have been obvious to one of ordinary skill in the art at the time the invention was made to expect the spray-dried granules of Steventon to have irregular shapes due to the nature of the spray drying process.

However, as will be set forth in detail below, it is submitted that the controlled foaming systems defined by claims 1-2, 5-6 and 9-11 are non-obvious over and patentably distinguishable from Steventon. Accordingly, this rejection is traversed and reconsideration is respectfully requested.

The controlled foaming system of the present invention, as defined by claim 1, on which claims 2, 5-6 and 9-11 depend, is adapted for use in detergent compositions and comprises a foaming component capable of providing foaming or sudsing with agitation and a delayed-release foam suppressing component. The foam suppressing component includes a silicone foam suppressing agent which is releasably incorporated in a carrier, thereby delaying the release of the silicone foam suppressing agent. The silicone foam suppressing agent has an average droplet diameter of from about 1 to about 50 microns. The carrier is water-soluble or water dispersible, substantially non-surface active, detergent-impermeable, and non-hygroscopic. The foam suppressing component is in the form of irregularly shaped flakes having a minimum dimension of not less than about 0.05 cm and a maximum dimension at least about 20% greater than the minimum dimension. The flakes have a thickness of from 0.05 cm to 0.15 cm.

In contrast, Steventon discloses granular powders having hydrophobic silicone oils which can be incorporated into dental preparations in solid form, such as denture cleanser tablets, toothpowder and the like to deliver enhanced antiplaque activity (page 1, lines 15-18). Moreover, the granular powder includes from about 50% to about 99% of a water-soluble

carrier, and from about 1% to about 50% of a hydrophobic silicone oil dispersed within the carrier, wherein the spray-dried powder has a volume average particle size in the range from about 20  $\mu\text{m}$  to about 500  $\mu\text{m}$  (page 2, lines 37-38 - page 3, lines 5-9). However, Applicants find no teaching or suggestion by Steventon of a controlled foaming system having a foam suppressing component in the form of irregularly shaped flakes as defined by claim 1, particularly where the flakes have a thickness of from 0.05 cm to 0.15 cm. Rather, Steventon merely teach spray-dried granular powders, which are particularly incorporated into dental preparations.

There is no evidence of record which establishes that a spray-dried powder as taught by Steventon provides irregularly shaped flakes as presently claimed. Contrary to the Examiner's assertions, the present application discloses formation of the flakes, not by spray drying, but by mixing with a molten carrier followed by cooling (page 13, lines 16-19), and milling and/or breaking (page 14, lines 14-23). The spray-dried process disclosed in Steventon would not lead one skilled in the art to consider a foam suppressing component formed from flakes.

In asserting the flaked shape of the foam suppressing component was obvious, the Examiner cited the case, *In re Dailey*, 149 U.S.P.Q. 47 (CCPA 1966), alleging that a change in form or shape is within the level of ordinary skill in the art. *In re Dailey*, involved claims directed to a nursing container, where it was held that the configuration of the container was not significant. However, the configuration of a container versus the shape of an active component adapted to be used in a detergent are significantly different. It can be appreciated that the shape and size of components used in detergents have been found to provide numerous advantages, and, as such, particular shapes, such as the flakes used for the foam suppressing component are significant.

To support a rejection under 35 U.S.C. § 103, a reference must provide an enabling disclosure, i.e., it must place the claimed invention in the possession of the public. *In re Payne*, 203 U.S.P.Q. 245 (CCPA 1979). Steventon does not teach or suggest the controlled foaming system of claim 1 comprising the combination of a foaming component and a delayed-release foam suppressing component formed of irregularly shaped flakes having a thickness from 0.05 cm to 0.15 cm. In order to establish obviousness based on a combination of the elements disclosed in the prior art, there must be some motivation, suggestion or teaching of the desirability of making the specific combination that was made by the applicant. *In re Dance*, 160 F.3d 1339, 1343, 48 U.S.P.Q.2D (BNA) 1635, 1637 (Fed. Cir. 1998); *In re Gordon*, 733 F.2d 900, 902, 221 U.S.P.Q. (BNA) 1125, 1127 (Fed. Cir. 1984). As such, Steventon fails to teach a controlled foaming system having a foam suppressing component as defined by claim 1. Particularly, Steventon does not teach or suggest a delayed-release foam suppressing component being formed from irregularly shaped flakes having a thickness from 0.05 cm to 0.15 cm. As such, Steventon does not render claim 1 obvious.

It is therefore submitted that the cleaning compositions as defined by claims 1-2, 5-6 and 9-11 are non-obvious over and patentably distinguishable from Steventon and the rejection of claims 1-2, 5-6 and 9-11 under 35 U.S.C. § 103 has been overcome. Reconsideration is respectfully requested.

Claims 1-2, 5-7 and 9-11 were rejected under 35 U.S.C. § 103(a) as being unpatentable over the Akay et al WO 93/01269 (hereinafter referred to as "Akay et al") in view of the Akay European Patent Application EP 0382464 A3 (hereinafter referred to as "EP '464"). The Examiner asserted that Akay et al disclose antifoam particles comprising silicone antifoam on a cellulose carrier coated with citric acid, sodium carbonate and PEG. The

Examiner alleged that the method of producing the antifoam is described in EP '464. Moreover, the Examiner contended that the antifoam particles are normally admixed into a detergent product which includes detergent active and detergency builder, and that such detergent product is used in washing machines. The Examiner noted that Akay et al do not teach the antifoam in the form of irregularly shaped flakes having minimum dimension of not less than about 0.05 cm and a maximum dimension at least about 20% greater than the minimum dimension, but the Examiner asserted that EP '464 teaches a method of encapsulating particles having a resulting product with an average size of 771  $\mu\text{m}$  and 1598  $\mu\text{m}$ .

However, as will be set forth in detail below, it is submitted that the controlled foaming systems defined by claims 1-2, 5-7 and 9-11 are non-obvious over and patentably distinguishable from Akay et al in view of EP '464. Accordingly, this rejection is traversed and reconsideration is respectfully requested.

Akay et al disclose antifoam particles having high viscosity silicone antifoam absorbed onto a porous, particulate organic carrier exemplified by cellulose or wood flour, which prevents deactivation with an inorganic carrier (abstract). The antifoam particles are taught to be granules which are mixed into the detergent powder (page 31, lines 11-12). Moreover, the carrier material and the absorbed silicone antifoam are coated so as to inhibit the escape of antifoam from the carrier particles and hence block contact between the antifoam and the detergent powder (page 6, lines 8-13). Furthermore, Akay et al also teach that the preferred method for coating is described in EP '464 (page 12, lines 1-4). EP '464 teaches a coating process to encapsulate solid particles or liquid droplets (abstract). EP '464 also discloses the particle sizes of the some of the coated particles, which are indicated to

depend on numerous factors such as raw material characteristics and process conditions (page 18, lines 6-8).

However, Applicants find no teaching or suggestion by Akay et al in view of EP '464 of a controlled foaming system having a foam suppressing component in the form of irregularly shaped flakes as defined by claim 1, particularly where the flakes have a thickness of from 0.05 cm to 0.15 cm. Rather, Akay et al merely teach antifoam particles including granular powders, but provides no teaching or suggestion relating to the controlled foaming systems as having foam suppressing components formed from irregularly shaped flakes as employed in the present claims 1-2, 5-7 and 9-11. Moreover, EP '464 does not teach such foam suppressing components because EP '464 only further described the process for coating the particles taught in Akay et al which, as discussed above, does not render the present inventive system obvious. Moreover, the reliance by the Examiner on the particle sizes described in EP '464 is inappropriate because those particle sizes involve the resulting coated particle, while the limitation for the thickness limitation as set forth in claim 1 is directed to the flaked foam suppressing component, which is not taught or suggested by the combination of Akay et al and EP '464.

To support a rejection under 35 U.S.C. § 103, a reference must provide an enabling disclosure, i.e., it must place the claimed invention in the possession of the public. *In re Payne, supra*. Akay et al in combination with EP '464 do not result in the controlled foaming system of claims 1-2, 5-7 and 9-11, which require the controlled foaming system include a foaming component and a delayed-release foam suppressing component which is in the form of irregularly shaped flakes having a thickness from 0.05 cm to 0.15 cm. As such, Akay et al in view of EP '464 do not render claim 1 obvious.

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**Amendment dated November 20, 2003**  
**Reply to Official Action of August 20, 2003**

It is therefore submitted that the cleaning compositions as defined by claims 1-2, 5-7 and 9-11 are non-obvious over and patentably distinguishable from Akay et al in view of EP '464 and the rejection of claims 1-2, 5-7 and 9-11 under 35 U.S.C. § 103 has been overcome. Reconsideration is respectfully requested.

It is believed that the above amendments and remarks represent a complete response to the Examiner's rejections under 35 U.S.C. § 103, placing the present application in condition for allowance. Reconsideration and an early allowance are requested. In the event that the present Amendment does not place the application in condition for allowance, entry of the Amendment for purposes of appeal is requested.

Respectfully submitted,

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